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TROY, DANIEL J				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/574,532

Applicant(s)

BANNASCH ET AL.

Examiner

DANIEL J. TROY

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2010.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 13, 15-26, and 28 is/are rejected.
7) ☒ Claim(s) 14 and 27 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 14 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Regarding claim 14, the term "preferably" makes it unclear if having the form of an electric plug-in connection or of an inductive connection via two corresponding coils is required by the claim. For the remainder of the office action the examiner assumes that the limitations following preferably are required by the claim; appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13, 15, 17, 18, 19, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrmann ("tarnen und Tauschen bei der Marine" - applicant's admitted prior art in the specification) in view of Salzeder (US Publication Number 2002/0149510 A1).

4. Regarding claim 13, Herrmann discloses, a system for protecting ships against terminal homing phase-guided missiles comprising a target data analysis system (Page 3 L19-21) comprising a computer (Page 3 L24) sensors for detecting terminal homing phase-guided missiles and its expected trajectory (Page 3 L23); means to measure the wind speed and direction (P3 L29-30); motion and/or navigation sensors for detecting the ship's own data: traveling speed, direction of travel, rolling and pitching motions (Page 3 L31-33); a fire control calculator which inherently communicates with the computer (Page 4 L1-4); at least one decoy launcher arranged on the ship and dirigible in azimuth and elevation (Page 3 L27), but lacks specifically disclosing a database in which appropriate decoy patterns for the respective missile type and the respective attack structure are stored which allow to generate a particular decoy pattern.

5. Salzeder teaches that it is known in the art to have a database in which appropriate decoy patterns for the respective missile type and the respective attack structure are stored which allow to generate a particular decoy pattern (P [0028]; the last sentence). The use of a database in which appropriate decoy patterns for the respective missile type and the respective attack structure are stored which allow to generate a particular decoy pattern conserves decoy ammunition by only firing target relevant decoys.

6. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Herrmann, by using a database in which appropriate decoy patterns for the respective missile type and the respective attack

structure are stored which allow to generate a particular decoy pattern similar to that disclosed by Salzeder, to conserve decoy ammunition.

7. Regarding claims 15 and 24, Salzeder teaches the decoy ammunitions comprise integrated delay elements freely programmable by means of the fire control (P [0050] describes the "walk-off" which includes delays programmed in the ammunitions).

8. Regarding Claim 18 Herrmann in view of Salzeder discloses the claimed invention except for NTDS, RS22, RS422, EHTERNET, IR, or BLUETOOTH data interfaces. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use NTDS, RS22, RS422, EHTERNET, IR, or BLUETOOTH data interfaces since it was known in the art that any of these listed data interfaces can be used to transfer data from one device to another.

9. Regarding claim 17, Salzeder teaches UV warning sensors (P [0028])

10. Regarding claim 19, Salzeder teaches radar reflectors (P [0031]).

11. Regarding claim 25, Hermann and Salzeder disclose the claimed invention except for the specific departure velocities. It would have been obvious to one having ordinary skill in the art at the time the invention was made to a certain departure velocity, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

12. Regarding claim 26, Hermann teaches the fire control calculator transmitting the determined data for deploying the decoy formation to the decoy launchers (Page 4 L3-4). A standardized data interface is inherent to any electronic system, having a non-

standardized data interface would only increase the complication of the system by including unnecessary conversion.

13. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herrmann ("tarnen und Tauschen bei der Marine" - applicant's admitted prior art) in view of Salzeder (US Publication Number 2002/0149510 A1) in further view of Darnall (US Patent Number 7086318 B1).

14. Regarding claim 16, Herrmann in view of Salzeder discloses an apparatus as described previously, but lacks a drive with an angular acceleration of at least $50 \frac{\text{deg}}{\text{s}^2}$.

15. Darnall teaches that it is known in the art to use a drive with an angular acceleration of at least $50 \frac{\text{deg}}{\text{s}^2}$ (C3 L38). The use of a drive with an angular acceleration of at least $50 \frac{\text{deg}}{\text{s}^2}$ can help the system quickly reach the desired firing position.

16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Herrmann in view of Salzeder, by using a drive with an angular acceleration of at least $50 \frac{\text{deg}}{\text{s}^2}$ similar to that disclosed by Darnall, to help the system quickly reach the desired firing position.

17. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrmann ("tarnen und Tauschen bei der Marine" - applicant's admitted prior art) in view of Salzeder (US Publication Number 2002/0149510 A1) in further view of Thornburg (US Patent Number 4852456).

18. Regarding claims 20-23, Herrmann in view of Salzeder discloses an apparatus as described previously, but lacks unfolding by means of gases.

19. Thornburg teaches that it is known in the art to unfold by means of gases. The use of unfolding by gases provides a fast and reliable means for unfolding the decoy.

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Herrmann in view of Salzeder, by using gases as unfolding means similar to that disclosed by Thornburg, to provide a fast and reliable means for unfolding the decoy.

21. Claims 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herrmann ("tarnen und Tauschen bei der Marine" - applicant's admitted prior art) in view of Salzeder (US Publication Number 2002/0149510 A1) in further view of Maury (US Patent Number 4222306).

22. Regarding claim 28, Herrmann in view of Salzeder discloses an apparatus as described previously, but lacks the use of the ship's on-board reconnaissance radars.

23. Maury teaches that it is known in the art to use of the ship's on-board reconnaissance radars (C13 L41-46). The use of the ship's on-board reconnaissance radars reduces cost by only using one radar system.

24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Herrmann in view of Salzeder, by using the ship's on-board reconnaissance radars similar to that disclosed by Maury, to reduce costs.

25. Claims 13, 15, 17, 18, 19, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herrmann ("tarnen und Tauschen bei der Marine" - applicant's admitted prior art in the specification) in view of Dahlberg (US Patent 4,712,181).

26. Regarding claim 13, Herrmann discloses, a system for protecting ships against terminal homing phase-guided missiles comprising a target data analysis system (Page 3 L19-21) comprising a computer (Page 3 L24) sensors for detecting terminal homing phase-guided missiles and its expected trajectory (Page 3 L23); means to measure the wind speed and direction (P3 L29-30); motion and/or navigation sensors for detecting the ship's own data: traveling speed, direction of travel, rolling and pitching motions (Page 3 L31-33); a fire control calculator which inherently communicates with the computer (Page 4 L1-4); at least one decoy launcher arranged on the ship and dirigible in azimuth and elevation (Page 3 L27), but lacks specifically disclosing a database in which appropriate decoy patterns for the respective missile type and the respective attack structure are stored which allow to generate a particular decoy pattern.

27. Dahlberg teaches that it is known in the art to have a database in which appropriate decoy patterns for the respective missile type and the respective attack structure are stored which allow to generate a particular decoy pattern (Column 2 lines 40-42). The use of a database in which appropriate decoy patterns for the respective missile type and the respective attack structure are stored which allow to generate a particular decoy pattern reduces time needed to launch effective countermeasures.

28. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Herrmann, by using a database in which

appropriate decoy patterns for the respective missile type and the respective attack structure are stored which allow to generate a particular decoy pattern similar to that disclosed by Dahlberg, to reduce the time needed to activate effective countermeasures.

Allowable Subject Matter

29. Claims 14 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and resolving the 35 U.S.C. 112, second paragraph listed above in the rejection.

Response to Arguments

30. Applicant's arguments filed 2/20/2009 have been fully considered but they are not persuasive.

31. Regarding the argument that Salzeder fails to disclose a database with decoy patterns which generate a particular decoy pattern, the examiner disagrees. Salzeder discloses in paragraph [0028] that a computer determines the type of ammunition adapted to a threat, time periods between shots, quantity of ammunition and direction of deployment, therefore the computer of Salzeder generates the shot pattern of the decoys by selecting a particular ammunition type, time and duration of deployment, time periods between shots, quantity and direction based on the type of threat. In response to applicant's argument that the references fail to show certain features of applicant's

invention, it is noted that the features upon which applicant relies (i.e., direct access) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

33. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **DANIEL J. TROY** whose telephone number is (571)270-3742. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

35. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on (571) 272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

36. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DJT/

/Stephen M. Johnson/
Primary Examiner, Art Unit 3641